In this study, we examine foreign market entry mode choice and firm performance for a sample of European Union firms. Examining both financial and non-financial performance measures, we attempt to determine if firms that select their entry mode based on transaction cost, institutional context, and cultural context variables perform better than firms that make other mode choices. We found that mode choice did matter. Firms whose mode choice could be predicted by the extended transaction cost model performed significantly better, on both financial and non-financial measures, than did firms whose mode choice could not be predicted by the extended transaction cost model. Implications for future research are discussed.

Research efforts in the area of international entry mode selection have tended to concentrate on transaction cost explanations (Makino and Neupert, 2000; Taylor, Zou and Osland, 1998; Cleeve, 1997; Padmanabhan and Cho, 1996; Erramilli and Rao, 1993; Hennart, 1991; Gatignon and Anderson, 1988; Anderson and Gatignon, 1986). However, recently scholars such as Brouthers and Brouthers (2000) and Delios and Beamish (1999) have begun extending transaction cost entry mode theory by including cultural context and institutional context variables, as well as transaction cost variables.

Researchers (Roberts and Greenwood, 1997; North, 1990; Kogut and Singh, 1988) have suggested that adding both institutional and cultural context variables to transaction cost theory enhances our understanding of international entry mode choice in two ways. First, according to Delios and Beamish (1999, p. 917), institutional context variables provide a valuable extension to transaction cost theory.
theory because they "refer to conditions that undermine property rights and increase risks in exchange". Second, Brouthers and Brouthers (2000) suggest that cultural context variables need to be added to transaction cost entry mode models because they tend to influence managerial cost and uncertainty evaluations in target markets.

Despite advances in entry mode theory, little consideration has been given to the performance implications of foreign market entry mode choices (Brouthers, Brouthers and Werner, 1999; Woodcock, Beamish and Makino, 1994). Several studies have examined performance differences between wholly owned modes (acquisitions or greenfield start-ups), and joint ventures (e.g., Nitsch, Beamish and Makino, 1996; Pan and Chi, 1999; Pan, Li and Tse, 1999; Shrader, 2001; Simmonds, 1990; Woodcock et al., 1994). However, Shaver (1998) suggests that studies like these typically suffer from an endogeneity problem, i.e., mode performance is compared without regard to the characteristics of the particular investment decision.

Two recent studies attempted to control for endogeneity when examining entry mode performance. Shaver (1998) examined the performance implications of firm diversification mode choice (wholly owned acquisitions or greenfield start-ups) based on variables included in previous research. He found that firms whose diversification mode choice corresponded to the variables' predictions performed better than firms whose diversification mode choice did not conform. Brouthers et al. (1999) examined the performance implications of firms selecting entry modes (wholly owned, joint ventures, licensing and exporting) based on Dunning's Eclectic Framework. They found firms selecting entry modes predicted by Dunning's framework performed significantly better than firms using other entry modes.

The objective of this paper is to enhance our understanding of the impact of transaction cost, institutional and cultural context variables on international entry mode choice and mode performance. First, we provide a theoretical and empirical extension to the work of Brouthers and Brouthers (2000) and Delios and Beamish (1999), in determining entry mode choice based on institutional context, cultural context, as well as transaction cost variables. Second, building on the work of Brouthers et al. (1999) and Shaver (1998), we explore the normative value of this extended transaction cost model by comparing the financial and non-financial performance of mode choices that are predicted by the extended transaction cost model with the performance of other mode choices.

**ENTRY MODE CHOICE**

Previous research tends to rely exclusively on transaction cost theory to explain international mode choice decisions (e.g. Makino and Neupert, 2000; Taylor et al., 1998; Cleeve, 1997; Erramilli and Rao, 1993; Hennart, 1991; Gatignon and Anderson, 1988; Anderson and Gatignon, 1986). Transaction cost variables are concerned with the costs of integrating an operation within the firm as compared with the costs of using an external party to act for the firm in a foreign market (Williamson, 1985). Transaction costs are composed of the costs of finding and negotiating with an appropriate partner, and the costs of monitoring the performance of the partner firm (Makino and Neupert, 2000; Agarwal and Ramaswami, 1992; Erramilli and Rao, 1993; Hennart, 1991; Hill,
Transaction cost theory maintains that the costs of finding, negotiating and monitoring the actions of potential partners influence entry mode choice (Taylor et al., 1998; Agarwal and Ramaswami, 1992; Erramilli and Rao, 1993; Hennart, 1991; Hill, 1990; Williamson, 1985). Transaction cost theory suggests that market based modes are normally preferred because a firm can benefit from the scale economies of the market place (Williamson, 1985). However, a firm may encounter increased costs in finding or negotiating a market based agreement either (1) because of the difficulties of estimating and including all contingencies in the agreement, or (2) because of the inability to receive a fair price due to problems with information asymmetry (Taylor et al., 1998; Williamson, 1985). Furthermore, monitoring and enforcing market contracts may be difficult due to distance, communication problems or the lack of measurable outputs (Hill, 1990; Williamson, 1985).

Scholars have found that when the transaction costs associated with finding, negotiating and monitoring a potential partner firm are low, firms tend to rely on the market to deliver required target market benefits. But as these transaction costs increase, firms tend to switch their preference to more hierarchical modes, such as wholly owned subsidiaries (e.g., Taylor et al., 1998; Erramilli and Rao, 1993; Hennart, 1991; Gatignon and Anderson, 1988; Anderson and Gatignon, 1986). Hence, transaction cost theory suggests:

**Hypothesis 1:** Firms perceiving high transaction costs (high finding, negotiation and monitoring costs) in a market tend to use wholly owned modes while firms perceiving low transaction costs tend to use joint venture modes.

The level of firm-specific technology (asset specificity) may also influence mode choice, since firms with greater technology may incur higher transaction costs in safeguarding their technology from misappropriation (Hennart, 1991; Gatignon and Anderson, 1988; Williamson, 1985). Asset specificity refers to those assets that lose value in alternative use (Williamson, 1985). Asset specificity tends to create contracting hazards because of the impact of opportunism (Hill, 1990; Williamson, 1985). Opportunism results when a partner organization takes advantage of the other firm’s dependency through shirking, free-riding, or technology dissemination (Hennart, 1991; Hill, 1990; Gatignon and Anderson, 1988; Williamson, 1985). To safeguard specific assets from potential opportunism problems, firms may utilize higher control governance structures, such as wholly owned modes of entry (Makino and Neupert, 2000; Hennart, 1991; Gatignon and Anderson, 1988). Firms with less asset specific products or services may be less concerned with opportunism and safeguarding their technology and more concerned with mode efficiency. Transaction cost theory suggests that less integrated modes of entry provide more efficient organizational structures when there is a reduced threat from opportunism (Hill, 1990; Williamson, 1985). Hence, transaction cost theory suggests:

**Hypothesis 2:** Firms making high asset specific investments tend to use wholly owned modes of entry while firms making low asset specific investments tend to use joint venture modes.

North (1990) suggests that institutional theory must be combined with
transaction cost theory because institutions provide the structure in which transactions occur. Institutions define the “rules of the game” and include laws and regulations of the host country (Davis, Desai and Francis, 2000; Oliver, 1997; North, 1990). Transaction cost theory assumes the existence of institutional structures that support firm actions (Williamson, 1985; Meyer, 2001). Market based agreements can be used because of the potential for enforcement under the laws of the target country (North, 1990; Williamson, 1985). However, not all countries offer such secure institutional structures (North, 1990; Meyer, 2001).

In some countries, the institutional structure may create a situation where the transaction cost predicted mode choice may not be the preferred choice. Roberts and Greenwood (1997, p. 361) suggest that firms may “face pressures to adopt designs that are within the subset of sociopolitically legitimated designs” instead of adopting transaction cost based designs. For example, the institutional structure may provide barriers to entry such as legal restrictions on ownership (Delios and Beamish, 1999; North, 1990; Gomes-Casseres, 1990; Gatignon and Anderson, 1988). Basically, host governments may restrict foreign firm mode choice to increase domestic ownership. Such laws may limit a firm’s ability to exploit or enhance its capabilities through transaction cost predicted mode choices (Roberts and Greenwood, 1997; Gatignon and Anderson, 1988). Where legal restrictions exist, firms tend to seek legitimacy, as well as efficiency, by utilizing less integrated modes of entry (Delios and Beamish, 1999). Thus, institutional theory tends to suggest that a firm’s ability to exploit or enhance its capabilities may vary across institutional contexts in different national environments such that:

Hypothesis 3: Firms entering countries with few legal restrictions on mode of entry tend to use wholly owned modes while firms entering countries with many legal restrictions on mode of entry tend to use joint venture modes.

Brouthers and Brouthers (2000, p. 91) suggest that the “cultural context helps to define profit potential and/or the risks associated with a specific market entry.” National culture is part of cultural context, but cultural context is much broader and includes investment risks associated with different host country economic, legal, political and cultural systems, as well as market attractiveness (Brouthers and Brouthers, 2000; Agarwal, 1994; Dunning, 1993, Agarwal and Ramaswami, 1992). Firms tend to be selective and prefer to enter more attractive, less risky markets (i.e., culturally similar countries with stable economic, social and political conditions). Strategically, firms enter these markets with wholly owned modes in order to obtain a high return (Erramilli and Rao, 1993; Kim and Hwang, 1992). However, firms tend to prefer joint venture modes when entering countries characterized by high investment risk.

Investment risk can impact both the need for local knowledge and the exposure of assets. Beamish and Banks (1987) suggest that as investment risks increase, firms tend to seek local knowledge through joint ventures with local firms. They maintain that in high risk countries joint venture modes provide firms with lower long-term costs because of the pooling of information. Other scholars (e.g. Delios and Beamish, 1999; Erramilli and Rao, 1993; Kim and Hwang, 1992) suggest that firms entering markets char-
acterized by high investment risk may prefer joint venture modes to reduce their exposure to these risks, by reducing their resource commitment. Based on these predictive responses to the investment risk component of cultural context, we would expect that:

**Hypothesis 4:** Firms entering markets characterized by low investment risk tend to use wholly owned modes of entry while firms entering markets where investment risk is high tend to use joint venture modes.

The market potential [profit potential] component of cultural context may also influence mode choice because of its impact on market capacity and opportunity costs (Brouthers and Brouthers, 2000; Agarwal and Ramaswami, 1992; Kim and Hwang, 1992). First, target countries characterized by high market potential tend to have greater ability to absorb additional productive capacity, providing an opportunity to improve firm efficiency. In stagnant or shrinking markets over capacity may exist, making firms more reluctant to make large investments. Second, in high growth markets the opportunity costs may be higher because of growth opportunities and opportunities for premium pricing. In slow growth markets opportunity costs may be lower because of restrictions on growth and restrictions on pricing strategies.

Past research suggests that in high growth markets firms tend to prefer wholly owned modes of entry so they can (1) obtain scale economies, hence reducing per unit costs and (2) establish a long-term market presence (Agarwal and Ramaswami, 1992). In slow growth markets, firms may find that less integrated modes provide better opportunities either because (1) they do not increase the capacity in the market, hence not impacting competitor pricing strategies as severely, (2) can provide a better return on investment by minimizing the resource commitment, based on lower expected returns, or (3) reduce the switching costs of market exit if product/service sales are low (Kim and Hwang, 1992). This literature tends to suggest that:

**Hypothesis 5:** Firms entering high growth markets tend to use wholly owned modes of entry while firms entering less rapidly growing markets tend to use joint venture modes.

**MODE CHOICE AND PERFORMANCE**

Entry mode theory assumes that firms will select the mode that provides the best return on investment (Brouthers et al., 1999; Woodcock et al., 1994). Williamson (1985) and others (e.g., Shroeder, 2001; Shelanski and Klein, 1995; Masten, 1993) suggest that modes selected based on the transaction cost model provide firms with the most efficient (least cost) structure. Hence, transaction cost based mode choices provide the best performance because “the existence of any given organizational design is its efficiency compared to the set of available alternatives, including markets” (Roberts and Greenwood, 1997, p. 349). Firms that select other mode choices (less efficient mode choices) underperform and are eventually driven out of business by the competition (Roberts and Greenwood, 1997; Chiles and McMackin, 1996).

In addition, Poppo and Zenger (1998, p. 854) maintain that transaction cost based mode choices may lead to better performance because transaction cost theory provides managers with a method “to maximize performance by matching
exchanges, which differ in attributes, to governance structures, which differ in performance." Shrader (2001) and Hill (1990, p. 501) tend to agree, suggesting that transaction cost solutions compare transaction costs with "bureaucratic costs of managing an exchange". As a consequence, transaction cost based mode choices perform better because they consider both transaction costs and the costs of internal coordination and control.

Other scholars suggest that transaction cost based mode choices may not lead to the best performing mode, and as Ghoshal and Moran (1996, p. 16) suggest "... if so applied, are also likely to adversely affect their performance." Dyer (1997) and Zajac and Olsen (1993) suggest that transaction cost based mode choice decisions may not provide the best performing mode choice because it focuses on cost minimization; transaction cost theory ignores value enhancement. This stream of research suggests that transaction cost derived mode choices may not be the best performing because: (1) transaction cost theory ignores location specific costs (Tse, Pan and Au, 1997); and (2) transaction cost theory does not account for the revenue potential of decision options (Contractor, 1990; Brouthers et al., 1999). These scholars conclude that firms should consider both the efficiency and value enhancement potential of alternative entry mode choices. In this way firms determine the mode that provides the best overall performance, not just the most efficient mode.

The extended transaction cost model outlined in this paper attempts to address these concerns by considering not only mode efficiency variables (general transaction costs and asset specificity), but also variables that influence the value enhancement potential of international entry such as location specific costs (investment risk and institutional context) and revenue potential from a cultural context (market potential) perspective.

Including cultural context variables extends transaction cost theory by focusing on the market potential of investments and location specific costs. Agrawal and Ramaswami (1992) suggest that in high market potential countries firms utilizing wholly owned modes can achieve economies of scale that provide them with lower marginal cost, and as a consequence better performance. In lower market potential countries joint venture modes provide better performance. Cultural context is also concerned with the location specific costs associated with country specific investment risks. Brouthers, Brouthers and Werner (2000) suggest that investment risks influence entry mode choice and performance because they effect the costs related to control and resource commitment. They found that firms that used the entry mode predicted by risk theory performed significantly better than firms that used other modes of entry. This literature tends to indicate that including cultural context variables, as well as transaction cost variables, should lead to the choice of better performing entry modes.

Institutional variables extend transaction cost theory by examining the ability of a firm to expand or enhance its competitive advantage in particular markets. Davis, Desai and Francis (2000) and others (Chatterjee and Singh, 1999; Roberts and Greenwood, 1997) suggest that the institutional context may have a significant influence on mode performance because of the type and use of organizational capabilities and the connection
with mode choice. Institutional structures may restrict firm entry choice. Firms violating these institutional structures face reduced legitimacy and eventual extinction (Davis et al., 2000). Roberts and Greenwood (1997) maintain that firms will perform better if they pursue both institutional legitimacy and transaction cost efficiency. Oliver (1997) tends to agree, suggesting that meeting institutional mandates should result in a better fit with the environment and improved firm performance. This literature suggests that firms adopting entry modes that conform to institutional considerations, as well as transaction cost efficiencies, should perform better than firms using other entry modes.

Hence, we propose a model of international entry mode selection that balances the forces of cost minimization and value enhancement. We suggest that firms which select their mode of entry based on transaction cost, institutional context, and cultural context variables, as outlined above, should achieve greater mode performance than firms that select modes of entry that do not take these factors into consideration.

**Hypothesis 6:** Entry modes that can be predicted by transaction cost, institutional, and cultural context considerations, tend to perform better than entry modes that cannot be predicted by these variables.

**METHODOLOGY**

To test the hypotheses outlined above, a sample of European Union (EU) firms was selected. With the assistance of a CD-ROM database (AMADEUS), a selection of the 1000 largest EU companies was made. The AMADEUS database contains firm and financial information on over 100,000 EU companies, private and public, manufacturing and service. Data collection took place in early 1995. The largest EU firms were determined for the twelve member nations (pre-1995 expansion) by examining annual sales for 1993, the most recently reported financial year.

A total of two hundred thirteen questionnaires were returned (21%), providing a total of one hundred seventy-eight entries into foreign markets (the remaining thirty-five responding firms declined to participate in the study). One hundred twenty-one of these entries were for manufacturing firms while fifty-seven entries were for service firms. One hundred nine (61%) of the entries were wholly owned, forty-seven (26%) of the entries were through joint ventures, ten (6%) of the entries were by license agreement and twelve (7%) of the firms utilized export modes. Respondents made investments in 27 different countries (mostly developing and transitional economies) with only two countries receiving more than 10% of the investments. Because our theory contains several measures of target country characteristics (cultural context variables and institutional context variables), we did not include separate controls for each target country.

The data collected were checked for non-response bias and common methods variance. First, using t-tests we compared average total worldwide sales and average total worldwide employment figures of the sample to the respondents. These tests revealed no significant non-response bias. Second, Podsakoff and Organ (1986) suggest that if the variables in a study all load on one factor or there is one factor that explains the majority of the variance, then common methods variance may be a problem. Entering all the variables used in this study and per-
forming a factor analysis resulted in a four-factor solution, with the largest factor explaining only 19% of the variance. Hence, there appears to be no common methods variance problem with this data set.

Two dependent variables were included in this study. First, in testing the extended transaction cost model of mode choice, our dependent variable, entry mode, consisted of two mode types (1) wholly owned subsidiaries, and (2) joint ventures. The licensing and exporting entries were dropped from analysis because of the small number of respondents in each group. Examining wholly-owned and joint venture modes of entry is consistent with past transaction cost studies (e.g., Makino and Neupert, 2000; Taylor et al., 1998; Cleeve, 1997; Padmanabhan and Cho, 1996; Hennart, 1991), and past studies of mode performance (Shrader, 2001; Nitsch et al., 1996; Simmonds, 1990; Woodcock et al., 1994). Entry mode type was determined by asking respondents to indicate what mode they used in their most recent international entry. They were given the choice of four mode types: Wholly-owned modes (95% or more ownership), joint ventures (5% - 94% ownership), independent modes (such as license agreements), or exporting.

The second dependent variable, mode performance, was captured using subjective measures. Subjective measures (management evaluations) of performance are preferred when non-financial performance is involved or when objective financial measures are not available (Dess and Robinson, 1984; Geringer and Hebert, 1991). Past survey based studies have found that firms are reluctant to provide objective measures of performance for their foreign subsidiaries and have suggested that subjective measures be employed (e.g., Brouthers et al., 1999; Woodcock et al., 1994). In addition, in studies like ours, involving firms from multiple home countries, objective measures of performance may suffer from translation errors due to differences in reporting or accounting practices and exchange rate fluctuations (Brouthers et al., 2000; Brouthers et al., 1999). Subjective measures can be used to measure performance against multiple, financial and non-financial criteria (Dess and Robinson, 1984). Both financial (Shrader, 2001; Pan and Chi, 1999; Pan et al., 1999; Nitsch et al., 1996; Simmonds, 1990; Woodcock et al., 1994) and non-financial (Brouthers et al., 2000; Brouthers et al., 1999) measures of performance have been examined in past entry mode studies.

Subjective financial measures of performance provide valuable insights on achieving firm level economic goals and objectives. But financial measures may be of limited importance to firms because (1) the subsidiary may not have been formed to generate financial gains (i.e., R&D subsidiaries), or (2) because of timing differences (i.e., financial performance lags start-up) (Glaister and Buckley, 1998; Anderson, 1990; Geringer and Hebert, 1991). Since we are examining the most recent entry for our sample of firms, timing differences may mean that financial measures are of limited importance in this study.

Subjective non-financial measures of performance provide important information about a firm’s strategic and competitive goals (Anderson, 1990). Managers tend to judge the success or failure of a venture based on the achievement of preset goals and objectives (Anderson, 1990). Hence, even during the early stages of a new venture, managers tend to evaluate progress toward those pre-set
goals. While there is little consensus on strategic and competitive measures of performance, past entry mode scholarship has tended to concentrate on four factors: market share, marketing, reputation, and market access (Brouthers et al., 1999; Brouthers et al., 2000). For our sample of firms, these subjective non-financial measures of performance should provide valuable information on the progress of the new subsidiary toward meeting parent firms’ goals and objectives.

To gather subjective measures of mode performance, respondents were requested to rate three financial measures of mode performance—sales level, profitability, and sales growth—and four non-financial measures—market share, marketing, reputation, and market access—all of which were adopted from previous studies (Brouthers et al., 1999; Brouthers et al., 2000; Dess and Robinson, 1984; Geringer and Hebert, 1991). Respondents evaluated each mode performance measure on a scale of 1 “does not meet expectations at all” to 10 “meets expectations completely.” Factor analysis confirmed that two mode performance dimensions were present: financial (alpha = .82) and non-financial (alpha = .87).

Transaction costs were measured with two different variables. First, general transaction costs included a set of two Likert-type questions which examined the costs of searching for and negotiating with a potential partner and the costs of making and enforcing contracts in the target market, compared with the home market (Cronbach alpha = .73). Second, asset specificity was measured as the percentage of sales spent on R&D (Delios and Beamish, 1999; Hennart, 1991).

Scholars (Delios and Beamish, 1999; Gatignon and Anderson, 1988) have suggested that the main institutional context variable that differentiates international entry mode choice from domestic choice is the level of legal restrictions on foreign ownership. As in Anderson and Coughlan (1987), legal restrictions were measured using a single Likert-type question that read: “Were there legal restrictions on the choice of entry mode at the time you entered this country?” (1 many restrictions to 5 no restrictions).

Two cultural context variables were included: market potential and investment risk. Market potential was measured using a single Likert-type question that asked about the market potential of the target market (Taylor et al., 1998). Investment risk was measured with a set of four Likert-type questions that examined both the need for location-specific knowledge and the need to minimize resource commitment (Beamish and Banks, 1987). These questions examined (1) the risk of converting and repatriating profits, (2) nationalization risks, (3) cultural similarity, and (4) the stability of the political, social and economic conditions in the target market (alpha = .72).

Three control variables were included in this study: firm size, international experience and industrial sector. Firm size was measured as the number of employees worldwide (Erramilli and Rao, 1993; Gatignon and Anderson, 1988). International experience was measured as the number of years experience doing business outside the home country (Brouthers et al., 1999). To control for any industry effects we asked respondents to indicate whether the target market organization was a manufacturing or a service operation. As in Kogut and Singh (1988) we included a dichotomous industry sector variable which was given a value of 1 for manufacturing firms and a value of 2 for service firms.
A questionnaire was used for data collection. Two native speaking individuals translated the questionnaire into French and German. Two other individuals then back translated the questionnaires into English. This process was continued until the meaning of the questions in French and German were the same as the meaning in English.

French language questionnaires were sent to companies located in France, Belgium, and Luxembourg. German language questionnaires were sent to companies in Germany. English language questionnaires were sent to companies located in all other EU countries. Each firm was requested to complete the questionnaire for the country most recently entered. A letter was sent to the CEO of each of the 1000 firms asking for the name of the person responsible for international entry mode decisions. Questionnaires were then directed to those individuals. For firms that did not provide a name the questionnaires were directed to the person in a similar position (managing director international operations). Hence, we used key informants in corporate headquarters to provide both the entry mode decision criteria and the performance evaluation information.

Three mailings were made to each non-responding firm, one month apart. Mailings included a cover letter in the corresponding language, which explained the purpose of the study and requested assistance.

**FINDINGS**

To determine the validity of the hypotheses (H1-H5) concerning the extended transaction cost model of entry mode choice, we prepared a logistics regression analysis (Hennart, 1997; Hair, Anderson, Tatham and Black, 1995). Prior to running the logistics regression analysis, we prepared a correlation test to look for possible signs of multicollinearity (Table 1). As can be seen in Table 1, there were several statistically significant relationships. However, none of the relationships appeared to be large enough to warrant concern for multicollinearity (Hair et al., 1995).

**TABLE 1**

**CORRELATION MATRIX FOR ENTRY MODE CHOICE**

<table>
<thead>
<tr>
<th>Variable</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean</td>
<td>25.8</td>
<td>45.9</td>
<td>.10</td>
<td>-.02</td>
<td>-.03</td>
<td>-.08</td>
<td>-.04</td>
<td>1.2</td>
<td>.70</td>
</tr>
<tr>
<td>S.D.</td>
<td>29.3</td>
<td>29.2</td>
<td>1.00</td>
<td>.92</td>
<td>1.04</td>
<td>.98</td>
<td>.98</td>
<td>.41</td>
<td>.46</td>
</tr>
<tr>
<td>1. Firm size</td>
<td></td>
<td></td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>2. Int'l experience</td>
<td>.10</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Gen. TC</td>
<td>-.10</td>
<td>-.28*</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Market potential</td>
<td>.10</td>
<td>.18</td>
<td>-.01</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. Asset specificity</td>
<td>.14</td>
<td>.01</td>
<td>-.21</td>
<td>.23</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. Investment risk</td>
<td>.13</td>
<td>.25</td>
<td>-.04</td>
<td>-.01</td>
<td>.14</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7. Legal restrictions</td>
<td>-.05</td>
<td>.06</td>
<td>-.18</td>
<td>-.09</td>
<td>.09</td>
<td>-.47*</td>
<td></td>
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<tr>
<td>8. Industry sector</td>
<td>-.10</td>
<td>.04</td>
<td>.16</td>
<td>.00</td>
<td>-.13</td>
<td>-.06</td>
<td>.08</td>
<td></td>
<td></td>
</tr>
<tr>
<td>9. Mode</td>
<td>-.06</td>
<td>-.01</td>
<td>.24</td>
<td>.16</td>
<td>-.05</td>
<td>-.01</td>
<td>-.32*</td>
<td>-.21</td>
<td></td>
</tr>
</tbody>
</table>

*p < .01.
The results of the logistics regression analysis, examining mode choice, are reported in Table 2. The logistics regression was significant (p<.01) and explained 76.19 per cent of the entry modes selected, substantially higher than the chance rate of 57 per cent (Hennart, 1997).

The logistics regression provided support for a number of our hypotheses. First, the basic transaction cost hypothesis (H1) was supported, firms that perceived higher levels of transaction costs tended to use wholly owned modes of entry. Second, the institutional context hypothesis was supported (H3), firms entering markets characterized by high legal restrictions tended to use joint venture modes of entry. Finally, one of the cultural context hypotheses was also supported (H4), firms that perceived high levels of investment risk tended to use joint venture modes of entry. Consistent with past transaction cost studies (e.g., Delios and Beamish, 1999; Taylor et al., 1998; Cleeve, 1997; Hennart, 1991) we found no support for the asset specificity measure (H2), nor was support found for the market potential measure (H5), although both variables were correctly signed. Of the three control variables only industry type was significant with manufacturing firms using wholly-owned modes.

To test our mode performance hypothesis (H6) we used the two-stage technique described in Shaver (1998) and adopted by Brouthers et al. (1999, 2000). These scholars suggest that to determine if an entry mode decision-making model is normative, firms must be separated into two groups and then the performance of these two groups should be compared. In stage one of this process logistics regression is used to separate firms into two groups. Group one contained those firms whose entry mode choices were predicted by the extended transaction cost model (the fit group). Group two contained those firms whose entry mode choices were not predicted by the model (non-fit group). Based on this analysis a dummy variable (called "entry mode fit") was developed. Firms whose entry mode choices were predicted by the extended transaction cost model (the fit group of firms) were assigned a value of 0 for the "entry mode fit" dummy variable. Firms whose entry mode choices were not predicted by this model (the non-fit group of firms) were

**TABLE 2**

**LOGISTICS REGRESSION: ENTRY MODE CHOICE TABLE**

<table>
<thead>
<tr>
<th>Transaction Costs:</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>General transaction costs</td>
<td>.69* (.31)</td>
<td></td>
</tr>
<tr>
<td>Asset specificity</td>
<td>.19 (.32)</td>
<td></td>
</tr>
<tr>
<td>Institutional Context:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Legal restrictions</td>
<td>−.98** (.34)</td>
<td></td>
</tr>
<tr>
<td>Cultural Context:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Investment risk</td>
<td>−.64* (.35)</td>
<td></td>
</tr>
<tr>
<td>Market potential</td>
<td>.44 (.30)</td>
<td></td>
</tr>
<tr>
<td>Control Variables:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Firm size</td>
<td>−.34 (.26)</td>
<td></td>
</tr>
<tr>
<td>International experience</td>
<td>.32 (.28)</td>
<td></td>
</tr>
<tr>
<td>Industry type</td>
<td>−1.37* (.61)</td>
<td></td>
</tr>
<tr>
<td>Constant</td>
<td>2.60**</td>
<td>105</td>
</tr>
<tr>
<td>Chi square</td>
<td>27.75**</td>
<td></td>
</tr>
<tr>
<td>Percent correctly classified</td>
<td>76.19</td>
<td></td>
</tr>
</tbody>
</table>

**p < .01, *p < .05. Standard error in parenthesis, wholly owned = 1.**
assigned a value of 1 for the "entry mode fit" dummy variable.

In stage two, we prepared two multiple regression tests, one each for the financial performance and non-financial performance measures. In each of these regression tests, we included the dummy variable "entry mode fit" and several control variables. Using this method we could determine if firms whose entry modes were predicted by the extended transaction cost model (the fit group for firms) had significantly better mode performance than firms whose entry mode choices were not predicted by this model (the non-fit group).

In each of the regression tests, variance inflation factors (VIF) were examined to determine the existence of multicollinearity. None of the VIF scores were above 2.9, indicating that multicollinearity should not be a problem with these data (Hair et al., 1995).

Previous studies of entry mode and performance have tended to show, financial performance measures and mode choice may be related in certain situations, at least for wholly owned and joint venture modes of entry (e.g., Shrader, 2001; Pan and Chi, 1999; Pan et al., 1999). However, some scholarship indicates that financial measures of performance may be less appropriate in evaluating newer ventures (e.g. Glaister and Buckley, 1998; Anderson, 1990). Regresion Model 1 (Table 3) shows that financial mode performance appears to be significantly \( p < .0291, r^2 = .16 \) related to entry mode fit \( p < .01 \), market potential \( p < .10 \), and mode type \( p < .10 \). Specialy, we found that firms reported higher mode performance when they utilized the entry mode predicted by the extended transaction cost model, when they entered markets with higher market

<table>
<thead>
<tr>
<th><strong>TABLE 3</strong></th>
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<tr>
<td><strong>PERFORMANCE REGRESSION ANALYSES</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>Financial Performance</th>
<th>Non-financial Performance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Firm size</td>
<td>-.12 (.12)</td>
<td>-.26* (.11)</td>
</tr>
<tr>
<td>International experience</td>
<td>.01 (.11)</td>
<td>.01 (.09)</td>
</tr>
<tr>
<td>Market potential</td>
<td>.19+ (.11)</td>
<td>.22* (.09)</td>
</tr>
<tr>
<td>Investment risk</td>
<td>.15 (.11)</td>
<td>.23* (.10)</td>
</tr>
<tr>
<td>Mode type (WOS = 1)</td>
<td>.68+ (.42)</td>
<td>.81* (.38)</td>
</tr>
<tr>
<td>Entry mode Fit (Fit = 0)</td>
<td>-1.1** (.40)</td>
<td>-1.1** (.37)</td>
</tr>
<tr>
<td>Constant</td>
<td>.19 (.40)</td>
<td>.34+ (.37)</td>
</tr>
<tr>
<td>N</td>
<td>83</td>
<td>73</td>
</tr>
<tr>
<td>sign. F</td>
<td>.0291</td>
<td>.0005</td>
</tr>
<tr>
<td>( R^2 )</td>
<td>.16</td>
<td>.29</td>
</tr>
</tbody>
</table>

**p < .01; *p < .05; +p < .10. Standard error in parenthesis.**

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Several scholars have argued that foreign market entry may not be made solely to increase financial performance (Anderson, 1990; Kim and Hwang, 1992). They suggest that increased financial performance may not occur for a number of years after initial foreign market entry, but that other measures of performance may help determine the effectiveness of foreign entry (Anderson, 1990; Geringer and Hebert, 1991). Model 2 (Table 3) examined the impact of entry mode fit and the five control variables on non-financial mode performance. Model 2 was significant ($p<.0005$) and had a higher $r^2 (.29)$ than did the financial mode performance regression analysis.

Firms reported significantly higher satisfaction with non-financial mode performance when the entry mode used fit the extended transaction cost model ($p<.01$), when market potential was high ($p<.05$), for firms using wholly owned modes ($p<.05$), when investment risk was high ($p<.05$), and for smaller sized firms ($p<.05$).

**CONCLUSIONS, LIMITATIONS, IMPLICATIONS**

Does the entry mode a firm uses in a foreign market affect the performance of the firm? This important question is as yet unanswered. While there is a growing volume of entry mode studies, most investigate only transaction cost related variables. Furthermore, these studies tend to examine the criteria used to select a mode of entry, but ignore performance implications. The few studies that have attempted to investigate firm performance and mode choice have suffered from an endogeneity problem (not included mode selection criteria), and have examined mainly financial performance measures. This study addressed each of these limitations and attempted to extend our understanding of entry mode choice and performance.

Based on our analysis, it appears that an extended transaction cost model of mode selection does a good job of predicting entry mode choice. Although not all the transaction cost and cultural context variables were significant predictors of international mode choice, our results suggest that mode selection appears to be driven by a combination of general transaction cost characteristics, institutional context (legal restrictions), and cultural context (investment risk) variables. Hence, this study provides additional support for those scholars (Brouthers and Brouthers, 2000; Delios and Beamish, 1999; North, 1990; Kogut and Singh, 1988) who suggested that the explanatory power of transaction cost models of mode choice could be improved by including aspects of both the institutional and cultural context.

Second, we can begin to answer the question about the influence of mode choice on firm performance. We found firms that used modes predicted by the extended transaction cost model reported significantly better mode performance, in terms of both financial and non-financial mode performance, than did firms whose entry mode choice could not be predicted by the extended transaction cost model. In addition, we found that mode type (wholly owned or joint venture) and market potential were also significantly related to our two measures of performance. Finally, we found that “smaller” EU1000 firms and firms entering markets characterized by high investment risk tended to rate non-financial performance higher than did larger firms and firms entering less risky markets, although there were no significant
differences for the financial performance measure. These differences between the financial performance and non-financial performance models may be caused by timing differences, since financial mode performance may be more difficult to measure for relatively newer international investments.

It should be noted that this study suffers from a number of limitations. First, since this study involved only very large EU firms the findings may not be applicable to small and medium sized firms or to firms outside the EU. Future research should include firms of various sizes and similar studies should be carried-out in other countries to expand the applicability of the findings.

Second, because our sample included only large, highly international firms, we may be seeing entries into more extreme markets (high risk developing markets) since these firms have entered the lower risk (more developed) markets many years previously. Thus, the results we are getting may be biased due to target countries being entered and may not represent mode performance implications in the developed, larger markets of the world. Future studies may want to gather information on developed market entries and mode performance for comparative purposes.

Another methodological limitation includes the timing of data gathering. While the most recent entry mode was studied to minimize the time between establishment and completion of the survey instrument, in many cases the time spread was a year or more. Because of this, our study may suffer from recall and memory biases, typical of retrospective reviews. In an attempt to minimize this impact, as in previous entry mode studies (e.g., Agarwal and Ramaswami, 1992; Brouthers et al., 1999) key informants were utilized. However future studies could go a long way by examining entry mode decisions as they are made, thus reducing time based biases.

This paper builds on the work of Brouthers and Brouthers (2000) and Delios and Beamish (1999) by examining an extended model of transaction cost mode selection that combines institutional context and cultural context theories with transaction cost theory. Other theories offer alternative or complementary views of entry mode selection and performance. For example, Pan and Chi (1999) suggest that entry timing may influence firm performance. Furthermore, Yan and Gray (1994) suggest that IJV partner activities may impact IJV performance. Scholars like Kim and Hwang (1992) suggest that firm strategic goals may also influence mode choice. Future studies may extend our understanding of entry mode selection and performance by building on these theories and combining them with the model presented in this paper.

Further, we included a measure of international experience as a control variable in this study. Some recent scholarship (e.g. Padmanabhan and Cho, 1999) suggests that experience with specific entry mode types may also influence entry mode choice. Future research may wish to explore, both theoretically and empirically, how successful and unsuccessful experiences with various mode types (wholly owned, joint venture etc.) may impact entry mode choice decisions.

This study examined the performance implications of using an extended transaction cost model of international entry mode choice. Future studies may wish to examine other relationships using this same set of variables. For example, using structural equation models, researchers
could explore the relationships between and among the variables, mode types and mode performance. This technique would help identify moderating influences, not explored in the present study, hence enhancing our understanding of mode choice and performance.

As in past transaction cost based entry mode studies, this study has not considered the risk preferences of managers and the impact of differing risk preferences on international entry mode choice. Transaction cost theory assumes risk neutrality (Williamson, 1985). However, scholars like Chiles and McMackin (1996) suggest that managers may not be risk neutral. They suggest that risk averse managers may make different decisions than risk seeking managers. Future entry mode research may want to address this important issue by developing and testing a model of transaction cost mode choice adjusted for differing managerial risk preferences. Such a study would extend our knowledge about entry mode choice and decision making.

A shortcoming of our performance measurement technique is that different firms may have different norms for measuring performance. A performance measure of “five” for one firm may be completely different than a measure of “five” for another firm. Future studies could attempt to adjust for this potential difference by gathering objective as well as subjective measures of mode performance. Additionally, in an attempt to standardize respondent scales, numerical performance levels could be defined in the questionnaire.

While our findings are generally supportive of the normative value of using an extended model of transaction cost mode choice that includes both institutional and cultural context variables, much more work is needed. We used an analytical method described by Shaver (1998) and adopted in previous entry mode studies (Brouthers et al., 2000; Brouthers et al., 1999). Drazin and Van de Ven (1985) and Masten (1993) offer alternative methods for determining the performance implications of contingency models. Future research may want to apply other analytical methods to the entry mode model/performance question to help determine the robustness of our findings.

Finally, another critical question remains unaddressed, how do firms determine the importance of each independent variable, compared to the other variables in making mode choice decisions? If one variable suggests wholly owned modes and one joint venture modes, how does a firm determine the weight to give each of the variable determinants? Future research studies could go a long way in improving our understanding of entry mode decision making by focusing on the trade-offs made by managers in evaluating differing entry mode criteria.

This study provides at least two possible contributions to managerial practice. First, although further research is needed, it is beginning to appear that extending the transaction cost model of international entry mode selection to include both institutional and cultural context variables may help increase the usefulness of the model in the international arena. The transaction cost model may do an excellent job of predicting mode selection for firms interested in capability exploitation and firm efficiency. However, firms interested in adding value and enhancing their capabilities may find that considering institutional and cultural context issues as
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well as transaction cost issues leads to a more value-added based decision.

The second important managerial implication of our study regards normative aspects of entry mode selection. Our study, like earlier work of Shaver (1998) and Brouthers et al. (1999, 2000), suggests that managers can achieve better performance if they select and use theoretically determined modes of entry. Our study indicates that firms achieve greater financial performance if they select their mode of entry based on transaction cost efficiency criteria, and institutional and cultural context value-added criteria. In addition, non-financial performance also appears to be enhanced by considering both the efficiency (transaction costs) and value enhancement (institutional and cultural context) potential of alternative mode choices.

NOTES

1. Scott (1995) conceptualizes institutional forces into three distinct groups, regulative, normative and cognitive. Regulative forces include laws and rules. Normative forces include values and norms. Cognitive forces are the frames or conception of reality by which meaning is made. Regulative forces have their root in economics, while normative and cognitive forces are rooted in sociology (Peng and Heath, 1996). In this study we concentrate on the economic forces of institutional theory (regulative forces) since these forces are most commonly found in entry mode research (e.g., Brouthers and Brouthers, 2000; Delios and Beamish, 1999; Gomes-Casseres, 1990).

2. Although scholars such as Tse, Pan and Au (1997) suggest that transaction cost theory ignores location specific costs, Williamson (1985) does consider location cost differences (1) when discussing the costs of finding, negotiating and enforcing a contract and (2) in his site specificity form of asset specificity. We include the differences in finding, negotiating and enforcing contracts as a transaction cost variable. However, transaction cost concepts of location specific assets tend to differ from our location specific costs, which are conceptualized as country-specific investment risks, market potential, and regulations restricting mode choice.

REFERENCES


